

=> S (DECONTAMINATION OR DETOXIFICATION OR STERILIZATION OR PURIFICATION OR DISINFECTION OR REMEDIATION) AND (CHLORINE DIOXIDE)

19019 DECONTAMINATION

88 DECONTAMINATIONS

19036 DECONTAMINATION

(DECONTAMINATION OR DECONTAMINATIONS)

23861 DETOXIFICATION

38 DETOXIFICATIONS

23880 DETOXIFICATION

(DETOXIFICATION OR DETOXIFICATIONS)

49328 STERILIZATION

82 STERILIZATIONS

49359 STERILIZATION

(STERILIZATION OR STERILIZATIONS)

369658 PURIFICATION

1215 PURIFICATIONS

370507 PURIFICATION

(PURIFICATION OR PURIFICATIONS)

335735 PURIFN

239 PURIFNS

335839 PURIFN

(PURIFN OR PURIFNS)

542710 PURIFICATION

(PURIFICATION OR PURIFN)

51601 DISINFECTION

120 DISINFECTIONS

51656 DISINFECTION

(DISINFECTION OR DISINFECTIONS)

33273 REMEDIATION

239 REMEDIATIONS

33361 REMEDIATION

(REMEDICATION OR REMEDIATIONS)

156051 CHLORINE

881 CHLORINES

156626 CHLORINE

(CHLORINE OR CHLORINES)

555774 DIOXIDE

7057 DIOXIDES

557591 DIOXIDE

(DIOXIDE OR DIOXIDES)

8866 CHLORINE DIOXIDE

(CHLORINE(W)DIOXIDE)

L2 2571 (DECONTAMINATION OR DETOXIFICATION OR STERILIZATION OR
PURIFICAT
ION OR DISINFECTION OR REMEDIATION) AND (CHLORINE DIOXIDE)

=> L2 AND HUMIDIFIER

L2 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> S L2 AND HUMIDIFIER

2093 HUMIDIFIER

1019 HUMIDIFIERS

2468 HUMIDIFIER

(HUMIDIFIER OR HUMIDIFIERS)

L3 5 L2 AND HUMIDIFIER

=> DISPLAY L3 IBIB ABS KWIC 1-5

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:542701 CAPLUS

DOCUMENT NUMBER: 145:10709

TITLE: Apparatus and method for producing chlorine
dioxide

INVENTOR(S): Sanderson, William D.

PATENT ASSIGNEE(S): Sanderson, William, D., USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006060563	A2	20060608	WO 2005-US43455	20051202
WO 2006060563	A3	20060817		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20050079124	A1	20050414	US 2004-2647	20041203
KR 2006063524	A	20060612	KR 2004-107775	20041217
EP 1838613	A2	20071003	EP 2005-826049	20051202
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.: US 2004-2647 A 20041203				
US 2003-492729P P 20030806				
WO 2004-US25201 A2 20040805				
WO 2005-US43455 W 20051202				

AB Provided are app. and methods for making chlorine
dioxide on demand by converting a chlorine
dioxide generating soln. into chlorine dioxide
by exposure to UV-light.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Apparatus and method for producing chlorine dioxide

AB Provided are app. and methods for making chlorine
dioxide on demand by converting a chlorine
dioxide generating soln. into chlorine dioxide
by exposure to UV-light.

ST app chlorine dioxide manuf air purifn

IT Air purification apparatus
Fans

UV radiation
 Valves
 (app. and method for producing chlorine dioxide)
 IT Apparatus
 (blowers; app. and method for producing chlorine dioxide)
 IT Air purification
 (disinfection; app. and method for producing chlorine dioxide)
 IT Nozzles
 (dispersion; app. and method for producing chlorine dioxide)
 IT Cooling apparatus
 (evaporative; app. and method for producing chlorine dioxide)
 IT Air conditioners
 (humidifiers; app. and method for producing chlorine dioxide)
 IT Scrubbers
 (vapor; app. and method for producing chlorine dioxide)
 IT 7758-19-2, Sodium chlorite 7772-98-7, Sodium thiosulfate
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
 (app. and method for producing chlorine dioxide)
 IT 10049-04-4P, Chlorine dioxide
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (app. and method for producing chlorine dioxide)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:486393 CAPLUS

DOCUMENT NUMBER: 144:494064

TITLE: Mixed oxidizing solution for air disinfection
 and humidification and ultrasonic humidifier
 using the solution

INVENTOR(S): Yamamura, Nobuo

PATENT ASSIGNEE(S): Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006130234	A	20060525	JP 2004-325371	20041109
PRIORITY APPLN. INFO.:			JP 2004-325371	20041109

AB The mixed oxidizing soln. is obtained by mixing an aq. soln. contg. ClO₂, ascorbic acid, and NaHCO₃ with water while adjusting the amts. x (m3) .times. 10-3 of the soln., y (g) of ascorbic acid, and z (g) of NaHCO₃ as follows: 2.5 .ltoreq. x .ltoreq. 4; 40 .ltoreq. y .ltoreq. 6.5; and 60 .ltoreq. z .ltoreq. 100 to 1 m3 of water. The ultrasonic humidifier is for evapg. the mixed oxidizing soln. by vibration and releasing the evapg. vapor of the soln. outside. While scarcely emitting malodor, the soln. is sprayed to air for air disinfection and deodorization.

TI Mixed oxidizing solution for air disinfection and humidification and ultrasonic humidifier using the solution

ABltoreq. 4; 40 .ltoreq. y .ltoreq. 6.5; and 60 .ltoreq. z .ltoreq. 100 to 1 m3 of water. The ultrasonic humidifier is for evapg. the mixed oxidizing soln. by vibration and releasing the evapg. vapor of the soln. outside. While scarcely emitting malodor, the soln. is sprayed to air for air disinfection and deodorization.

ST air disinfection deodorization ultrasonic soln evapn; chlorine dioxide ascorbic acid soln evapn; ascorbic acid sodium carbonate soln evapn

IT Evaporation
(by ultrasonic vibration; oxidizing soln. and ultrasonic humidifier for air disinfection and deodorization using soln.)

IT Air purification
(deodorization; oxidizing soln. and ultrasonic humidifier for air disinfection and deodorization using soln.)

IT Air purification
(disinfection; oxidizing soln. and ultrasonic humidifier for air disinfection and deodorization using soln.)

IT Vibration
(ultrasonic; oxidizing soln. and ultrasonic humidifier for air disinfection and deodorization using soln.)

IT 74-93-1, Methylmercaptan, processes 7664-41-7, Ammonia, processes 7783-06-4, Hydrogen sulfide, processes
RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)
(oxidizing soln. and ultrasonic humidifier for air disinfection and deodorization using soln.)

IT 50-81-7, Ascorbic acid, processes 144-55-8, Sodium hydrogen carbonate, processes 10049-04-4, Chlorine dioxide
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(oxidizing soln. contg.; oxidizing soln. and ultrasonic humidifier for air disinfection and deodorization using soln.)

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:718386 CAPLUS

DOCUMENT NUMBER: 141:209202

TITLE: Gas delivery apparatus and methods of use

INVENTOR(S): Warner, John J.; Hamilton, Richard A.; O'Neill, Gary A.

PATENT ASSIGNEE(S): Selective Micro Technologies, LLC, USA

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004073755	A1	20040902	WO 2004-US5194	20040220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-449065P P 20030220

AB Disclosed are methods and app. that can be employed to initiate a plurality of individual gas generating reactions coterminously or sequentially. Generally, the invention provides an app. defining a plurality of reactant housings. A seal is disposed about the orifice of one or more reactant housings which can be disrupted to initiate the generation of gas by exposing reactant to an initiating agent. The process may be repeated as desired, so as to safely and conveniently generate desired concns. of gas at desired time intervals.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Water purification
(app.; gas delivery app. and methods of use)

IT Delivery apparatus
Gases
Sterilization and Disinfection
(gas delivery app. and methods of use)

IT Air conditioners
(humidifiers; gas delivery app. and methods of use)

IT 7446-11-9, Sulfur trioxide, uses 10049-04-4, Chlorine dioxide

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(gas delivery app. and methods of use)

L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:453063 CAPLUS

DOCUMENT NUMBER: 141:3825

TITLE: Remediating embedded microbial contaminants using a gas such as chlorine dioxide

INVENTOR(S): Hamilton, Richard A.; Warner, John J.; O'Neill, Gary A.

PATENT ASSIGNEE(S): Selective Micro Technologies, Llc, USA

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004045654	A2	20040603	WO 2003-US36212	20031114
WO 2004045654	A3	20040930		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2003295499 A1 20040615 AU 2003-295499 20031114
 PRIORITY APPLN. INFO.: US 2002-426630P P 20021114
 US 2003-449245P P 20030220
 WO 2003-US36212 W 20031114

AB Disclosed are methods and app. for remediating embedded microbiol.
 contaminants, e.g., mold, fungus, virus and bacteria, from hard surfaces,
 for example drywalls, plasters, stucco, car upholstery, carpets, etc. The
 method includes the step of exposing an embedded microbiol. contaminant to
 a gas, such as chlorine dioxide or ethylene gas,
 thereby remediating the microbiol. contaminant.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Remediating embedded microbial contaminants using a gas such as
 chlorine dioxide

AB . . . car upholstery, carpets, etc. The method includes the step of
 exposing an embedded microbiol. contaminant to a gas, such as
 chlorine dioxide or ethylene gas, thereby remediating
 the microbiol. contaminant.

ST gas surface microbial decontamination sterilization
 app

IT Sterilization and Disinfection
 (app.; gases for remediating embedded microbial contaminants from hard
 surfaces)

IT Carpets
 Decontamination
 Eubacteria
 Fungi
 Mold (fungus)
 Plaster
 Spray atomizers
 Spraying apparatus
 Sterilization and Disinfection
 Stucco
 Surface
 Surface treatment
 Virus
 (gases for remediating embedded microbial contaminants from hard
 surfaces)

IT Air conditioners
 (humidifiers; gases for remediating embedded microbial
 contaminants from hard surfaces)

IT 74-85-1, Ethylene, biological studies 75-21-8, Ethylene oxide,
 biological studies 7446-09-5, Sulfur dioxide, biological studies
 10049-04-4, Chlorine dioxide
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (gases for remediating embedded microbial contaminants from hard
 surfaces)

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:491076 CAPLUS
 DOCUMENT NUMBER: 139:54696
 TITLE: Apparatus and method for controlled delivery of a gas

INVENTOR(S): Hamilton, Richard Alexander; Warner, John J.
 PATENT ASSIGNEE(S): Selective Micro Technologies, LLC, USA
 SOURCE: PCT Int. Appl., 107 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003051406	A1	20030626	WO 2002-US40301	20021217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20040022676	A1	20040205	US 2002-225769	20020822
CA 2470434	A1	20030626	CA 2002-2470434	20021217
AU 2002357278	A1	20030630	AU 2002-357278	20021217
EP 1467774	A1	20041020	EP 2002-805178	20021217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002015019	A	20050510	BR 2002-15019	20021217
JP 2005512769	T	20050512	JP 2003-552338	20021217
CN 1627963	A	20050615	CN 2002-828165	20021217
MX 2004005961	A	20041101	MX 2004-5961	20040617
AU 2006200542	A1	20060302	AU 2006-200542	20060208
PRIORITY APPLN. INFO.:			US 2001-341429P	P 20011217
			US 2002-225769	A 20020822
			US 2000-183368P	P 20000218
			US 2000-183638P	P 20000218
			US 2000-190028P	P 20000317
			US 2000-660117	A2 20000912
			US 2001-259896P	P 20010104
			AU 2001-43167	A3 20010216
			US 2001-785634	A2 20010216
			WO 2002-US40301	W 20021217

AB Disclosed are app. for delivery of a gas, e.g., carbon dioxide and/or chlorine dioxide, and methods of its use and manuf. The app. includes a sachet constructed in part with a hydrophobic material. The sachet contains one or more reactants that generate a gas in the presence of an initiating agent, e.g., water. The app. can also include a barrier layer and/or a rigid frame. In another embodiment, the app. is combined with a reservoir that can be used to deliver a gas to the reservoir and, optionally, a conduit. In another embodiment, the app. is incorporated into a fluid dispersion system that includes a dispersion app., e.g., a humidifier.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Disclosed are app. for delivery of a gas, e.g., carbon dioxide and/or chlorine dioxide, and methods of its use and manuf. The

app. includes a sachet constructed in part with a hydrophobic material. The . . . conduit. In another embodiment, the app. is incorporated into a fluid dispersion system that includes a dispersion app., e.g., a humidifier.

IT Bottles

Delivery apparatus

Materials handling

Medical goods

Water purification

(app. and method for controlled delivery of gas)

IT Air purification

(deodorization; app. and method for controlled delivery of gas)

IT Air conditioners

(humidifiers; app. and method for controlled delivery of gas)

IT 124-38-9P, Carbon dioxide, uses 10049-04-4P, Chlorine dioxide

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(app. and method for controlled delivery of gas)